

* SWBAT solve problems using $W=F*d$

Sep 6-2:31 PM

Survey

Pancakes

* Pick up:

- slip of paper (for later)
- whiteboard, marker, eraser

Opening Question:

What was one example of physics work from yesterday?

PUSHED THE ROLLY CHAIR

Centering...

Welcome!!!

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SECA Physics
Tuesday 10 November 2015

Sep 7-7:04 AM

Examples:

Throwing an eraser
Horse pulling a cart

Candy!

A force is a push or a pull.

Work is when a force causes a displacement.

↳ NOT IN THE SAME PLACE

Sep 21-2:13 PM

eureka: <http://www.youtube.com/watch?v=O88BvvKotFo>

It's an equation:

Let's practice...

Units???

JOULE = NEWTON · METER

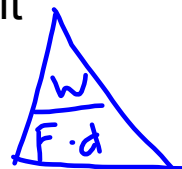
$$W = F \cdot d$$

1. If 1200 N of force lifts a barbell 2 meters from the floor, what is the work done?

$$W = F \cdot d = 1200 \text{ N} \cdot 2 \text{ m} = 2400 \text{ J}$$

2. If 40 Joules of work was done on a rock as it moved 4 meters, what was the force?

$$F = \frac{W}{d} = \frac{40 \text{ J}}{4 \text{ m}} = 10 \text{ N}$$



3. If 20 N of force resulted in 10 Joules of work, how far did the object move?

$$d = \frac{W}{F} = \frac{10 \text{ J}}{20 \text{ N}} = 0.5 \text{ m}$$

Nov 16-7:43 AM

$$2) 3.5 \cdot 200N = 700J$$

$$3) \frac{60J}{2m} = 30N$$

$$4) \boxed{F_{\text{GRAV}} = m \cdot g = 120N}$$

\downarrow $12 \text{ Kg} \cdot 10 \text{ M/S}^2$

$$5) W = F \cdot d = 120N \cdot 1.5m = 180J$$

Nov 10-10:59 AM

Daily 3 Questions

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. What units do we use to measure "work"?

A. pounds

B. meters

C. Joules

2. What is the equation for work?

$$W = F \cdot d$$

3. How much work is done if 1200 N of force is used to lift 2 meters of displacement.

$$W = 1200\text{N} \cdot 200\text{m} = 2400\text{J}$$

Nov 16-7:45 AM